



APPLIED MATERIALS®

THE INFORMATION AGE STARTS HERE™

[home](#) | [about](#) | [careers](#) | [investors](#) | [news](#) | [products](#) | [training](#) | [worldwide](#)

## Products

- ▶ [Events](#)
- ▶ [CMP Systems](#)
- ▶ [Etch Systems](#)
- ▶ [Installed Base Support Services \(IBSS\)](#)
- ▶ [Interconnect Systems & Modules \(ISM\)](#)
- ▶ [Process Diagnostics & Control Systems \(PDC\)](#)
- ▶ [Transistor & Capacitor Systems & Modules \(TCG\)](#)
  - [Epi](#)
  - [RTP](#)
  - [LPCVD](#)
  - [Implant](#)
  - [SACVD](#)
  - [High-K](#)
  - [USJ](#)
  - [Technical Papers](#)
- ▶ [Consilium: Fab MES Software](#)
- ▶ [Etec: Mask Pattern Generation](#)

Applied Materials  
In The News

**2000 Fortune 500** Applied Materials ranked as one of the Fortune 500 Largest U.S. Corporations.

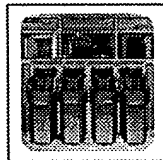
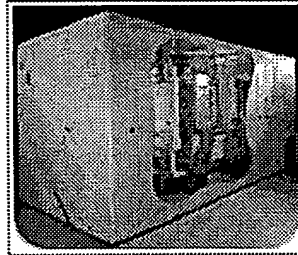
[▶ more](#)
☐ [search](#)
☐ [site map](#)
☐ [contact us](#)

## Legal Information

Copyright © 2000,

## Ion Implantation

Applied Materials entered the ion implant market in 1980 and introduced the industry's first fully automated implant system, the Precision Implant 9000, in 1985. An enhancement of this product, the Precision Implant 9200, was released in 1988 to accommodate 200-millimeter wafer sizes. In 1995, the Precision Implant 9500xR was introduced, extending our offering of implant products to include energy ranges of 2 to 750 kilo-electron volts, or "keV." The implant systems of Applied Materials are known for their advanced spoke wheel design used for holding the wafers during processing, which provides less contamination and better wafer cooling than solid disk systems.



Current implant products include the xR80S, which performs implants in the energy range of 2 to 80keV; the xR120S for energy ranges of 2 to 120 keV; and the xR LEAP for energy ranges of

200eV to 80keV. All these products provide a significant increase in productivity and a dramatic decrease in footprint size over traditional implant systems. The xR200S, an updated version of the Precision Implant 9500xR, operates over an energy range of 2 to 200keV, with an option to perform phosphorous implants up to 720keV.

Implant systems designed to meet the demands of technologies of 0.18 micron and beyond are based on the Quantum platform introduced in 1999. They include the 80keV low energy implanter, the Quantum 80; the Quantum Leap ultra-low energy implanter and the Quantum 120 extended energy implanter. All of the Quantum systems provide exceptional low energy productivity coupled with precise energy control required for ultra-shallow junction formation.

The Quantum ion implantation system delivers outstanding productivity and extremely

## Headlines

**05/24/2000 - View ▶**

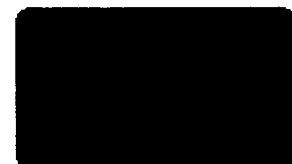
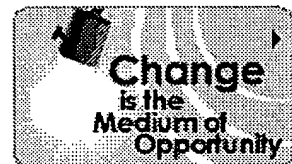
SOITEC Places Repeat Order for Applied Materials' Ion Implant Systems for SOI Manufacturing Line

**05/17/2000 - View ▶**

Applied Materials Announces Advanced Copper CMP Processes

**05/10/2000 - View ▶**

Applied Materials Announces Record Results for Second Fiscal Quarter 2000

[▶ more](#)


Copyright © 2000,  
Applied Materials, Inc.

outstanding productivity and extremely accurate energy control to meet your advanced Front-End-Of-Line (FEOL) challenges. Quantum offers both low energy and high current capabilities in a single platform, enabling source/drain engineering and Ultra-Shallow Junction formation. Evolved from the highly successful xR LEAP beamline, the Quantum system provides twice the throughput for shallow junction formation at 0.18 micron and beyond.

---

► Technical Papers

---

[home](#) | [about](#) | [careers](#) | [investors](#) | [news](#) | [products](#) | [training](#) | [worldwide](#)